

US EPA ARCHIVE DOCUMENT

CATALOG DOCUMENTATION  
NATIONAL COASTAL ASSESSMENT DATABASE  
2003 NEW YORK/NEW JERSEY HARBOR SYSTEM  
STATION LOCATION AND VISIT INFORMATION

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1. DATA SET IDENTIFICATION

1.1 Title of Catalog document

National Coastal Assessment Database  
2003 New York/New Jersey Harbor System  
Station Location and Sampling Visit Information

1.2 Author of the Catalog entry

Melissa Hughes, Raytheon

1.3 Catalog revision date

June 12, 2012

1.4 Data set name

Station Location and Sampling Visit Information

1.5 Task Group

Regional Environmental Monitoring and Assessment Program

1.6 Data set identification code

NA

1.7 Version

NA

1.8 Requested Acknowledgment

If you plan to publish these data in any way, EPA requires a standard statement for work it has supported: "Although the data described in this article have been funded wholly or in part by the U. S. Environmental Protection Agency through its EMAP-Estuaries Program, it has not been subjected to Agency review, and therefore does not necessarily reflect the views of the Agency and no official endorsement should be inferred."

## 2. INVESTIGATOR INFORMATION

### 2.1 Principal Investigator

Ms. Darvene A. Adams

U.S. Environmental Protection Agency - Region II

### 2.2. Investigation Participant

Ms. Sandi Robinson

U.S. Environmental Protection Agency - ORD/NHEERL/AED

## 3. DATA SET ABSTRACT

### 3.1 Abstract of the Data Set

The Station Location and Sampling Visit data sets provide geographic and visit information on the sites sampled in the New York/New Jersey Harbor region. The latitude and longitude for each station are given, as well as the area represented by a station. The water column depth at the time of sampling is reported. Most stations were selected probabilistically using a stratified random design; other stations were specifically located in a depositional area. In addition, the Visits data set presents information on the presence/absence of debris observed from the sampling platform. Presence of debris may be an indicator of aesthetic quality.

### 3.2 Keywords for the Data Set

sampling sites, latitude, longitude, depth, debris

## 4. OBJECTIVES AND INTRODUCTION

### 4.1 Program Objective

The project was designed to support resource management decisions related to pollution control and remediation throughout the New York/New Jersey (NY/NJ) Harbor and to assist the New York-New Jersey Harbor Estuary Program (HEP) in developing a contaminant monitoring strategy to be included in the Comprehensive Conservation and Management Plan (CCMP) for the NY/NJ Harbor system.

### 4.2 Data Set Objective

To provide accurate station location and visit information for each site visited in the NY/NJ harbor region.

### 4.3 Data Set Background Discussion

The New York/New Jersey Harbor System Sediment Assessment was based on methods used in the EMAP-EstUARIES program. A probability-based sampling design ensured an unbiased estimation of condition and that all areas within the system were potentially subject to sampling. The probability based sampling design also allowed calculation of confidence limits around estimates of condition.

### 4.4 Summary of Data Set Parameters

Station Location and Sampling Visit data set values were based on the geographic location of the station and other observations recorded at the time of the visit.

## 5. DATA ACQUISITION AND PROCESSING METHODS

### 5.1 Data Acquisition

#### 5.1.1 Sampling Objective

Accurately locate sampling sites, measure depth of water column

#### 5.1.2 Sample Collection Methods Summary

One hundred and thirteen sites were sampled, 28 in each of 3 sub-basins, Jamaica Bay, Raritan Bay and Upper Harbor, and 29 in Newark Bay. All stations were sampled in 2003. Sites not in a depositional area were selected by randomly placing a grid structure over the study area, selecting 14 grid cells at random from each stratum, and selecting a random location from within the selected cells. Cells were of equal area within strata.

#### 5.1.3 Sampling Start Date

July 1, 2003

#### 5.1.4 Sampling End Date

September 25, 2003

#### 5.1.5 Platform

Sampling was conducted from the USEPA vessel, the R/V CLEAN WATERS.

#### 5.1.6 Sampling Gear

LORAN-C

Differential-GPS (D-GPS)

Global Positioning System (GPS)

sonar

#### 5.1.7 Manufacturer of Sampling Equipment

NA

#### 5.1.8 Key Variables

The latitude and longitude of the station location were determined at the time of sampling. According to EPA Locational Policy: 1. Latitude is always presented before longitude; 2. Latitude and longitude are recorded as decimal degrees. The specific method, Loran or GPS, of determining the latitude and longitude is also recorded.

#### 5.1.9 Collection Method Calibration

NA

#### 5.1.10 Sample Collection Quality Control

NA

#### 5.1.11 Sample Collection Method Reference

Overton, W.S., D. White and D.L. Stevens. 1990. Design Report for EMAP: Environmental Monitoring and Assessment Program. EPA/600/3-91/053. U.S. Environmental Protection Agency, ORD, Washington, DC.

### 5.2 Data Preparation and Sample Processing

Not applicable

## 6. DATA MANIPULATIONS

Most values were assigned, based on geographic location.

### 6.1 Name of new or modified values

NA

### 6.2 Data Manipulation Description

NA

### 6.3 Data Manipulation Examples

Not applicable.

## 7. DATA DESCRIPTION

### 7.1 Description of Parameters

#### 7.1.1 Station Location

Attribute Name	Description
DATA GROUP	Group conducting sampling
SAMPLING YEAR	Year of sampling
STATE	State where station located
SYSTEM NAME	Large water body system
ESTUARY NAME	Small water body
STATION	Station identifier
LATITUDE	Latitude (decimal degrees)
LONGITUDE	Longitude (decimal degrees)
DEPTH	Station depth (m)

#### 7.1.2 Sampling Visit

Attribute Name	Description
DATA GROUP	Group conducting sampling
SAMPLING YEAR	Year of sampling
STATION	Station identifier
SAMPLING DATE	Sample collection date (MMDDYY)
VISIT NUMBER	Station visit number
DEPTH	Station depth (m)
TYPE OBSERVATION	Type of observation (Visual, Boat)
OBJECTS PRESENT	Objects present (Y/N)
TYPE OBJECT	Type of object present (Man-made, Natural)

#### 7.1.6 Precision to which values are reported

The precision is indicated by the attribute format reported under 7.1

#### 7.1.7 Minimum value in data set

Latitude decimal degrees      40.426  
Longitude decimal degrees    -74.298  
Station depth                    1.7

#### 7.1.8 Maximum value in Data Set

Latitude decimal degrees      40.867  
Longitude decimal degrees    -73.759  
Station depth                    25.3

### 7.2 Data Record Example

#### 7.2.1 Column Names for Example Records

##### 7.2.1.1 Station Location

Data Group,Sampling Year,State,Water Body System,Estuary Name,Station Name,Latitude Decimal Degrees,Longitude Decimal Degrees,Station Depth

##### 7.2.1.2 Sampling Visit

Data Group,Sampling Year,Station Name,Sampling Collection Date, Visit Number,Station Depth,Type Observation,Objects Present,Type Object

### 7.2.2 Example Data Records

#### 7.2.2.1 Station Location

R-EMAP Region 2,2003,New York,New York/New Jersey Harbor,  
Jamaica Bay,JB301,40.629,-73.759,9.5

R-EMAP Region 2,2003,New York,New York/New Jersey Harbor,  
Jamaica Bay,JB303,40.619,-73.778,10.7

R-EMAP Region 2,2003,New York,New York/New Jersey Harbor,  
Jamaica Bay,JB305,40.575,-73.87,4.3

#### 7.2.2.2 Sampling Visit

R-EMAP Region 2,2003,JB301,7/31/2003,1,10,Visual,N,

R-EMAP Region 2,2003,JB301,8/1/2003,2,10,,,

R-EMAP Region 2,2003,JB303,8/8/2003,1,11,Visual,N,

## 8. GEOGRAPHIC AND SPATIAL INFORMATION

### 8.1 Minimum Longitude

-74 Degrees 17.4 Minutes 48.00 Decimal Seconds

### 8.2 Maximum Longitude

-73 Degrees 45 Minutes 0.54 Decimal Seconds

### 8.3 Minimum Latitude

40 Degrees 25.2 Minutes 36.00 Decimal Seconds

### 8.4 Maximum Latitude

40 Degrees 51.6 Minutes 42.00 Decimal Seconds

### 8.5 Name of area or region

New York/New Jersey Harbor System:

Four sub-basins were sampled in the New York/New Jersey Harbor, including: Upper Harbor, Newark Bay, Lower Harbor (includes Raritan and Sandy Hook Bays) and Jamaica Bay. For purposes of this study, the region includes the lower portions of the Hudson, Passaic, Harlem, Hackensack and Raritan Rivers, upstream to a near-bottom salinity of 15 ppt, the East River to Long Island Sound and Lower Harbor to the Atlantic Ocean.

## 9. QUALITY CONTROL AND QUALITY ASSURANCE

### 9.1 Data Quality Objectives

NA

### 9.2 Data Quality Assurance Procedures

NA

## 10. DATA ACCESS

### 10.1 Data Access Procedures

Data can be downloaded from the WWW server.

### 10.2 Data Access Restrictions

Data can only be accessed from the WWW server.

### 10.3 Data Access Contact Persons

Ms. Darvene A. Adams

U.S. EPA Region II

### 10.4 Data Set Format

Tab-delimited

10.5 Information Concerning Anonymous FTP  
Data cannot be accessed via ftp.

10.6 Information Concerning WWW  
Data can be downloaded from the WWW servers.

10.7 EMAP CD-ROM Containing the Data Set  
Data are not available on CD-ROM

#### 11. REFERENCES

Adams, D. 1998. Quality Assurance Project Plan for Environmental Monitoring, "A 5-year Revisit of Sediment Quality in the NY/NJ Harbor." U.S. Environmental Protection Agency, Region 2, Edison, NJ.

Adams, Darvene and Sandra Benyi. 2003. Final Report: Sediment Quality of the NY/NJ Harbor System - A 5-Year Revisit. EPA/902-R-03-002. USEPA-Region 2, Division of Science and Assessment. Edison, NJ. December, 2003.

Overton, W.S., D.L. Stevens and D. White. 1990. Design Report for EMAP: Environmental Monitoring and Assessment Program. EPA/600/3-91/053. U.S. Environmental Protection Agency, ORD, Washington, DC.

Reifsteck, D.M., C.J. Strobels and D.J. Keith. 1993. Environmental Monitoring and Assessment Program - Near Coastal Component: 1993 Virginian Province Field Operations and Safety Manual. U.S. EPA NHEERL-AED. Narragansett, RI.

USEPA, 1989. Draft EPA Locational Data Policy. USEPA, Washington, DC

#### 12. TABLE OF ACRONYMS

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